

From glowbugs@theporch.com Fri Dec 27 07:56:00 1996
Return-Path: <glowbugs@theporch.com>
Received: from uro (localhost.theporch.com [127.0.0.1])
by uro.theporch.com (8.8.4/AUX-3.1.1)
with SMTP id HAA23929;
Fri, 27 Dec 1996 07:50:36 -0600 (CST)
Date: Fri, 27 Dec 1996 07:50:36 -0600 (CST)
Message-Id: <199612271350.HAA23929@uro.theporch.com>
Errors-To: ws4s@infoave.net
Reply-To: glowbugs@theporch.com
Originator: glowbugs@theporch.com
Sender: glowbugs@theporch.com
Precedence: bulk
From: glowbugs@theporch.com
To: Multiple recipients of list <glowbugs@theporch.com>
Subject: GLOWBUGS digest 395
X-Listprocessor-Version: 6.0c -- ListProcessor by Anastasios Kotsikonas
X-Comment: Please send list server requests to listproc@theporch.com
Status: 0

GLOWBUGS Digest 395

Topics covered in this issue include:

- 1) Weston Instrument Company
by jkh@lexis-nexis.com (John Heck)
- 2) Report on 6LR8 based CW TX
by Chris Broadbent <cfb@bga.com>
- 3) Re: 6AG7-6L6 statistics so far:
by Doug <doug@sunrise.alpinet.net>
- 4) Ocean Hopper Experiences
by jkh@lexis-nexis.com (John Heck)
- 5) Re: Report on 6LR8 based CW TX
by Chris Broadbent <cfb@bga.com>
- 6) Correction, Radio History
by "'AB7HI' Stephen Lee" <slee@u.washington.edu>
- 7) More thoughts on modular construction
by mjsilva@ix.netcom.com (michael silva)

Date: Thu, 26 Dec 96 12:12:37 EST
From: jkh@lexis-nexis.com (John Heck)
To: glowbugs@theporch.com
Subject: Weston Instrument Company
Message-ID: <9612261712.AA13428@beans.lexis-nexis.com>

Folks,

Can anyone point me to a reference for historical information on the Weston Instrument Company? I will be interested in information on the Weston company as well as its product line. This material might be published material or online sources. Thanks.

Regards,
John Heck, KC8ETS
1009 Donson Drive
Dayton, Ohio 45429
(513)865-7036(work)
jkh@lexis-nexis.com

Date: Thu, 26 Dec 1996 11:36:35 -0600 (CST)
From: Chris Broadbent <cfb@bga.com>
To: glowbugs@theporch.com
Subject: Report on 6LR8 based CW TX
Message-ID: <199612261736.LAA28568@zoom.bga.com>

Hi all,

Noticing how many people are posting reports on their homebrew glowbug based CW TX's, I don't want to be left out, hence this bark!

A quick recap - the TX is based on a 6LR8 triode/pentode, uses a crystal controlled Colpitts oscillator and a pi tank on the output. It puts about 15W into higher impedance antennae, about 10W into lower impedances. It works well on 80M, but not so good on 40M (I've been having so much fun with it, I haven't spent much time on correcting this :-). I plan on switching over to a Pierce arrangement for the oscillator. For whatever reason, the plate output from the triode oscillator stage at 40M is much reduced (even though the grid swing is not much different to that at 80M).

One other thing I have noticed is how the output drops when the capacitance on the antenna end of the pi tank is increased to match lower impedances. I presume the output cap is absorbing/radiating energy instead of it being passed on to the antenna. My plan here is to increase the number of turns on the inductor, thus allowing me to reduce the capacitor values. Hopefully, the inductor losses won't 'compensate'.

I'm using a National NC-125 as my RX. Quite a nice radio.

My antenna is a dipole buried in my low trees, I must do something about that, too (again, having too much fun using the thing to go out and tweak). I'm contemplating using an inverted V. I just need to figure out how to get the apex high enough. If I could use a 5/8th, I'd be really happy. I like it's gain and horizontal omnidirectional radiation pattern. Problem is, for 80M, it would pretty much have to be a tower (don't know what the

neighbours'll think).

Thus far, my longest distance contact is with a gentleman in Blue Bell, PA. I live in Austin, TX. When I get my antenna sorted out, I'm hoping to be able to do some serious long distance work.

I'm quite proud of my TX (being my first serious tube effort). I guess I should look into getting a picture or two on the Web. To show it off properly, I would love to meet you all on the waves with it. Unfortunately, being only a Tech+, I cannot venture down to 3579.xxxKHz. I must remain between 3675KHz and 3725KHz. My slow code would probably bore you all, anyway. But I'm doing something about that, practi[cs]ing when I can on the air. If any of you are up at 3695KHz or 3710KHz, keep a lookout for me (my TX can take up to four HC-6U Xtals, but those are the only 80M ones I have at the moment).

--

Cheers,

Chris F. Broadbent (KC5VQL)

Date: Thu, 26 Dec 1996 15:24:22 -0700
From: Doug <doug@sunrise.alpinet.net>
To: glowbugs@theporch.com
Subject: Re: 6AG7-6L6 statistics so far:
Message-ID: <32C2FB16.3B1B@alpinet.net>

HI Stacey...give 'em heck. If you really want to hear them cry...tell them what County you live in! I was thinking of a DX trip down to Ekalaka this summer to work the County Hunters' net, Carter County is a bit short on Hams. But, dont make too much of a fuss over the large bunches of people/hams on the left Coast...we dont want 'em moving here!

73

Doug, K7YD

Stacey T Hanrahan wrote:

>

> On Tue, 24 Dec 1996 19:49:23 -0600 (CST) "Brian Carling"

> <bry@mail1.mnsinc.com> writes:

>

> >Actually no, hams go on DXpeditions to WYoming and Montana these

> >days!

>
> Matter of fact, you might want to correct yourself Bry, there are
> at least 3 Montana stations on this list....
>
> There are quite a few mobile stations out here in Montana, but,
> with all the "big guns" out on the east coast, and the 6-landers
> out west, it just gets too frustrating even to conduct, let alone
> sit in on the Montana Traffic Net, right here in Montana. Yes,
> I do contest (mainly CW), and I do on occasion run SSB in the
> evenings. I QSL anyone needing Montana 100%, but I don't
> send one unless the station working me REALLY needs me
> that bad.
>
> The key is, you have to search, if your gonna find... Matter
> of fact, I still need ND on 10 meters, Hawaii on 160, and a
> small handful on 40 and 80.... Do you see me whining?
>
> Statistically, VE5-land has more hams than Montana, but
> they are rare on HF, more so than North Dakota, South
> Dakota and Wyoming combined.
>
> >We get TOO MANY stations from AZ, CA, NM and Washington State.
>
> That is because there are TOO MANY people living in those
> states....
>
> >
> >72.5 de AF4K
> >*****
> >*** 73 from Radio AF4K / G3XLQ in Gaithersburg, MD USA *
> >** E-mail to: bry@mnsinc.com *
> >*** See the great ham radio resources at: *
> >** <http://www.mnsinc.com/bry/> *
> >*****
> >
>
> 73 from rare DX - AA7YA
> Whitetail, Montana

Date: Thu, 26 Dec 96 12:29:16 EST
From: jkh@lexis-nexis.com (John Heck)
To: glowbugs@theporch.com
Subject: Ocean Hopper Experiences
Message-ID: <9612261729.AA13439@beans.lexis-nexis.com>

Folks,

Sometime last spring I picked up a shoebox full of TV repair kind of old parts just because there was a set of commercial coils in it. I didn't recognize the coils and there was no manufacturer listed so I just stuck them in a box. About a month ago I bought out a whole bunch of stuff at auction from the estate of an old ham/hobbyist type. The auction was way down in the country in Southern Ohio and I got this stuff for about a buck a box. There was a lot of water damage on most of it, and things were eaten up with hangar rash, but lo and behold, there was an old Knight Ocean Hopper in one of the boxes. To my delight I discovered that the coils I had at home were for this little radio. The coil in the radio was a BC band coil but I have the SW and ham band coils to go with it. I've been sanding off the rust and cleaning it up since then. The worst damage was to the front panel and the top of the chassis. Otherwise the rest of the chassis and the individual components were just dirty. I replaced the electrolytics, cleaned the variables, sprayed the pot, and fired it up. Darned if it doesn't work. I still need to replace the antenna trimmer and tune things up a little, but I am so amazed at the coincidence of finding the coils at one sale and the radio at another. For those who have stayed with me through all this spouting off about the sale finds I'll share a really good tip I picked up in a little crystal radio book called "Radios That Work For Free". To do a very good and safe job of cleaning air variables, bring enough water to cover the piece to boil in a pot. Take the pot off the heat and add one tablespoon of liquid fabric softener, I used Downey, stir and stick the variable in the solution. Let it sit 15 minutes then rinse and dry well. Does a terrific job. They look much like new. Merry Xmas to all!

Regards,
John Heck, KC8ETS
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(513)865-7036(work)
jkh@lexis-nexis.com

Date: Thu, 26 Dec 1996 17:56:48 -0600 (CST)
From: Chris Broadbent <cfb@bga.com>
To: glowbugs@theporch.com
Subject: Re: Report on 6LR8 based CW TX
Message-ID: <199612262356.RAA17806@zoom.bga.com>

>
> great job Chris!
>
> I am not sure what a 6LR8 is - never heard of it!
> Hey 15 watts is pretty good.

Thanks! A 6LR8 is a TV vertical sweep tube with a Novar base. I'm quite sure that I'll be able to squeeze quite a bit more from it once I deal with my oscillator woes. It seems to be tough as nails, dealing with bad SWR's and the abuse I put it through while figuring out my 40M problems without giving up the ghost (when it was dumping too much heat while I experimented, it did creak a little with thermal movement - but no glowing plates).

> I have only one other rock for 80m - right at 3725 kHz
> maybe I can attract a few Tech plusses up there, but most of the time
> I am on 3579 or 7050 kHz
> I also want to get some rocks for 40m in the 7100-7150 range, but I
> must just settle for finishing this VFO instead and then I can use
> that instead! I will look for you on those frequencies you mentioned
> some evening.
>
> Where did you get those HC-6/U crystals?

I ordered them from Jan Crystals along with four 40M crystals. They have a bit of a backlog, so it took about three weeks for them to arrive. One of the 40M crystal's swing is about 20% lower than the others, but I can live with that (I'm not even operating up there, yet). They ran me approx. \$11 per crystal (for the least accurate ones in PPM, can't remember the numbers). I chose frequencies that are spaced away from the tech+ band margins (and not sitting on 40M broadcasters, based on listening stats). I don't want to get dinged for operating out of band, especially on my first wades into the Ham waters.

> ...<SNIP>

--

Cheers,

Chris F. Broadbent (KC5VQL)

Date: Thu, 26 Dec 1996 19:47:47 -0800 (PST)
From: "'AB7HI' Stephen Lee" <slee@u.washington.edu>
To: glowbugs@theporch.com, qrp-1@Lehigh.EDU, crippe1@exis.net

Subject: Correction, Radio History

Message-ID: <Pine.A41.3.95b.961226193034.95846B-100000@homer23.u.washington.edu>

Well, I got the dates right but did the math wrong. It wasn't 95 years ago but 90 years ago that Reginald Fessenden engaged in the first music radio transmission. The date was the 24th of December 1906. This was the same year Lee deForest invented the vacuum tube, BTW.

But something did happen 95 years ago this past December 12. That's when Marconi successfully completed the first transatlantic wireless communication. Marconi was in St. Johns, Newfoundland, while his cohorts were located in Poldhu, Cornwall, England. It was a one way wireless communication. They used cablegrams to confirm the contact. Marconi had his own set of antenna problems as his massive antenna structures were both blown down by storms.

My thanks to all who expressed their appreciation for the post on radio history. 73 to all...

Stephen Lee, AB7HI, Tacoma, WA
slee@u.washington.edu

Date: Thu, 26 Dec 1996 23:46:58 -0800
From: mjsilva@ix.netcom.com (michael silva)
To: glowbugs@theporch.com
Subject: More thoughts on modular construction
Message-ID: <199612270746.XAA29362@dfw-ix7.ix.netcom.com>

Ever since somebody (name forgotten, sorry...) asked about modular construction I've been thinking about it and I'm anxious to give it a try. Usually when I run across a new circuit I don't try it out because it's too much trouble to build a new radio or partially gut an old one. Modular construction should, unless I'm missing something, make such experimentation/tinkering much easier. I realize the concept is nothing new, but it never occurred to me before to be systematic about it.

What I'm thinking is to mount each stage/block on a subchassis. I will probably start with miniboxes (they come in two sizes that should work well: 5 x 2.25 and 5.25 x 3), but a totally enclosed stage makes for very difficult debugging, so I'd only use the "top". The same result could be achieved using flat plates alone, either mounted flush or on spacers. The "chassis" will be two aluminum rails running across the entire assembly, one at the front and one at the back, to which the

subchassis will be screwed. The rails are necessary because mounting the s/c's on a plate will make it impossible to get to the underside of the circuits to poke around. The front panel (metal) will have whatever common components (pots, caps, switches) the rig will need.

I looked through a lot of catalogs for appropriate power connectors. The Cinch Jones ones would be a good choice but at 3 or more per rig they might get expensive, plus I don't want to be cutting square holes if I can avoid it, so I think I'll try standard banana or tip plugs and jacks. They come in lots of different colors, they're cheap, and they just need a simple round hole to mount. Using a different color for 6 and 12v filament power, and a few unregulated and regulated voltages should make things pretty idiot-proof. Signal leads could be run via coax or shielded cable and RCA connectors.

So, any comments, thoughts, additions, corrections, muses? I'm convinced that with the kinks worked out this can be a useful technique.

73,
Mike, KK6GM

End of GLOWBUGS Digest 395
